Richmond Refinery LPS Bulletin - Safety

Fire Hydrant Cap Incident





IMPACT: 10591

Location: Long Wharf Berth #1

Contact Information:

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Reference: Information



Storz cam lock cap that was removed



Phone Booth with hydrant manifold in background

Incident Description:

On Friday, March 25, 2011, two contract employees removed a 5-inch Storz cam lock cap from a pressurized fire hydrant manifold. Upon disengagement of the cam lock, the cap was launched through the glass of a phone booth approximately 10 feet away.

Investigation Findings:

- 1) The equipment design did not include a weep hole or vent to relieve any pressure from the valve leak by. This was potentially a hazardous situation that could have caused an injury to personnel.
- 2) It should be noted that at least one other similar incident occurred while removing a Storz cam lock cap on a fire truck that resulted in serious injury. Although, this incident occurred at a fire department not connected to Chevron, it highlights the potential seriousness of the situation.

Lessons Learned / Business Practices:

- 1) Storz cam lock caps do not have vent holes to relieve pressure and indicate valve leakage.
- 2) Without proper use of venting mechanisms during cap removal, there is the potential for a cap releasing with force causing injury and/or property damage.

What Worked Well:

 Contract employees did not sustain injury because they were not in the line of fire

Recommendations:

- 1) Consider, if the circumstances warrant, using threaded hose connections for hydrants and manifolds rather than using cam lock connections.
- If a cam lock connection is required for a hose connection, ensure that there is no pressure behind the cap before removing it.
 Training should be implemented as needed for safe removal of cam lock caps.
- 3) Consider weep holes or vents for all hydrant caps including threaded caps.

Tenets of Operations Violated:

Tenet 3 – Always ensure safety devices are in place and functioning.

Tenet 4 – Always follow safe work practices and procedures.

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Always remember to do your LPSA